

FCPC Renewable Generation Biogas Cogeneration Plant



Thank you

For additional information about the plant, please contact

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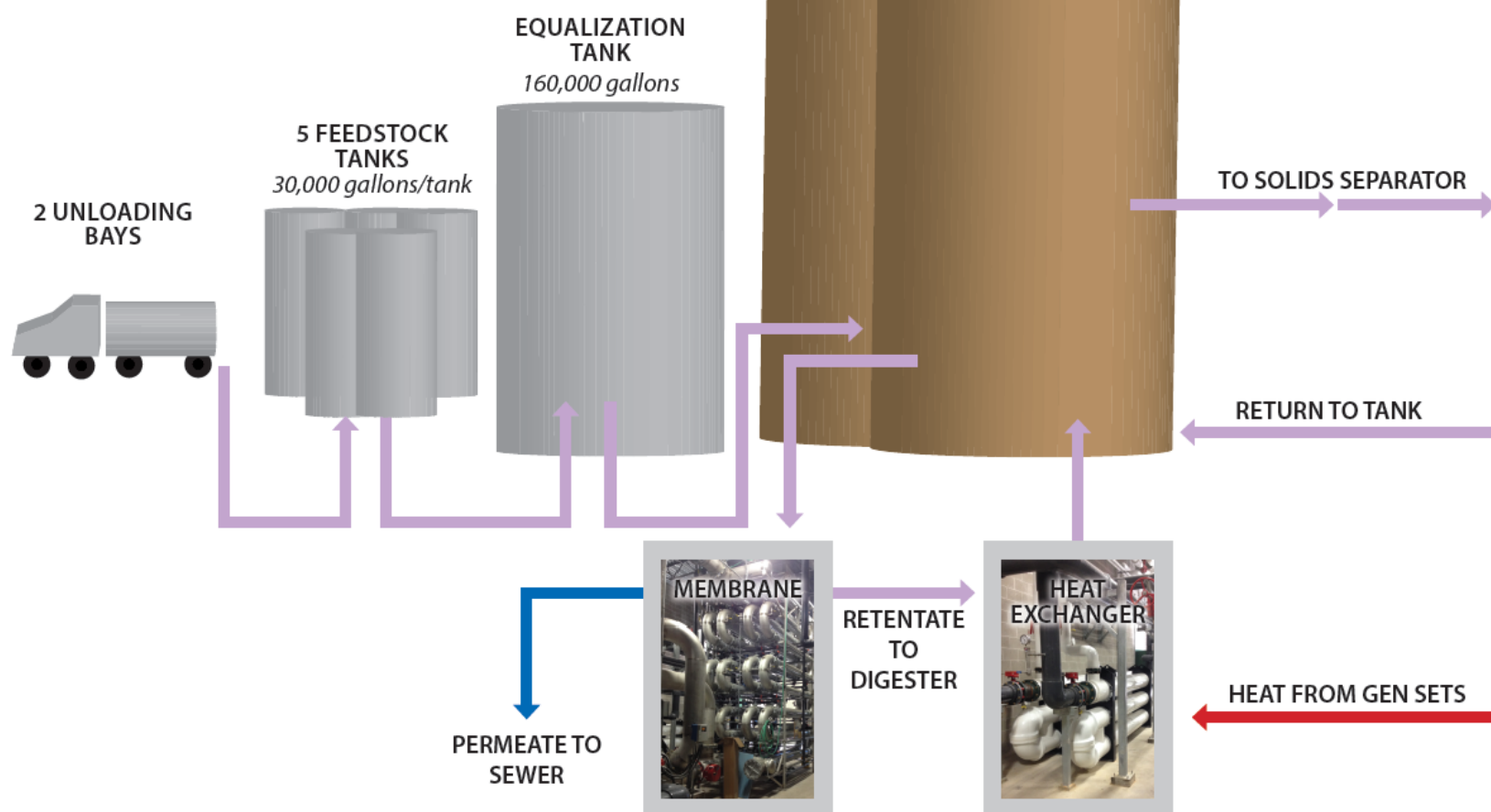
FCPC Renewable Generation

Biogas Power Plant

- 2.0 megawatt anaerobic biodigester and biogas facility located near Potawatomi Hotel Casino in Milwaukee, WI
- Operates on liquid (pumpable) food wastes
- Generates revenue from a combination of tipping fees and electricity sold through a WE Energies Renewable Energy Tariff (local utility), and heat sale to adjacent hotel



FEEDSTOCK HANDLING



Feedstock Delivery



Pumpable Feedstock Samples



INFLUENTS PUMPS

18 H.P. LANDIA Chopper
Pumps

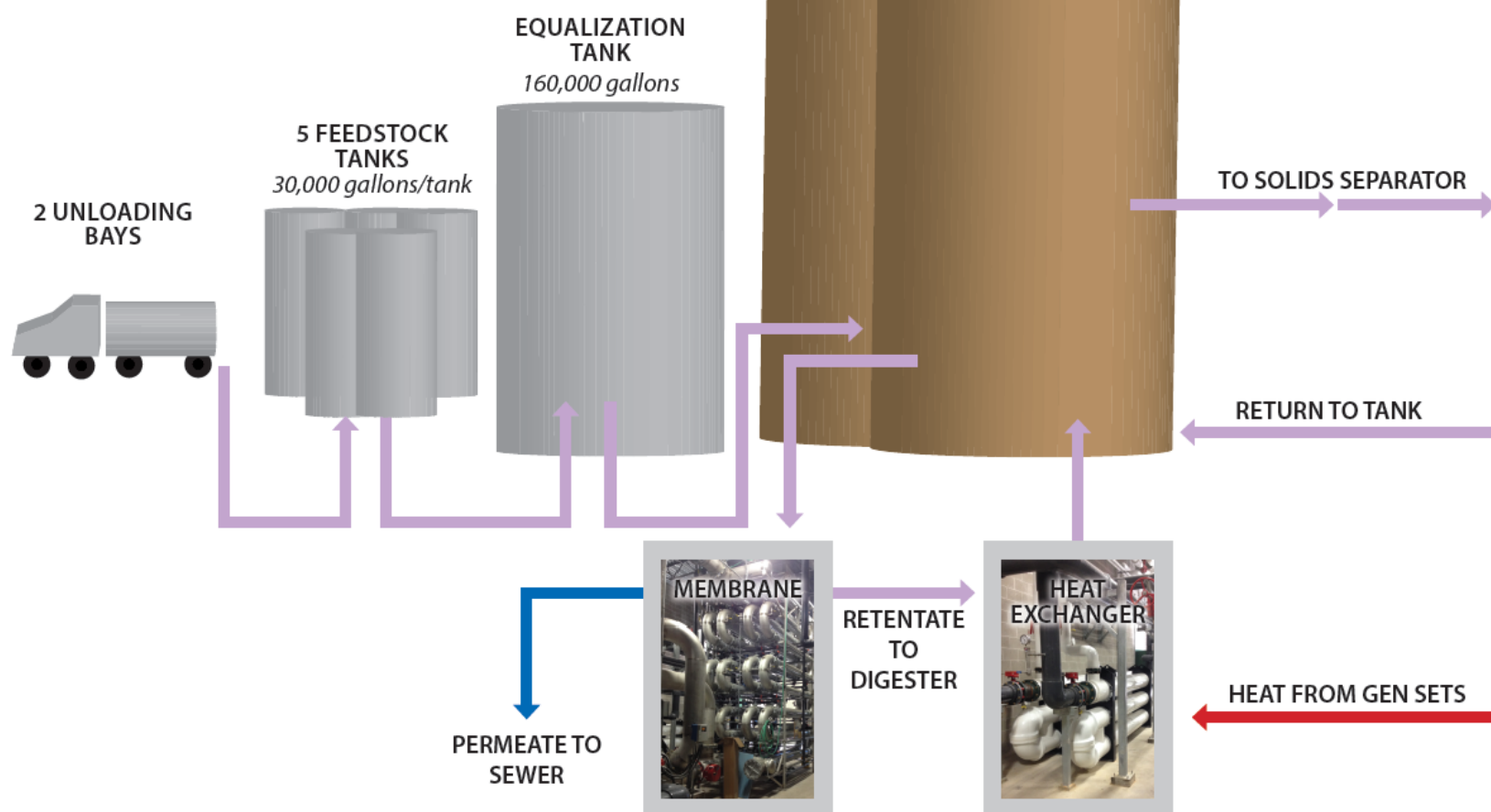
- They have worked extremely well

- 300 GPM
- Centrifugal/Cast Iron Casing
- Three stainless steel chopper blades / Approx. 10-12 in. Dia.

INFLUENT TANKS

- 5 tanks
- 14 ft. x 28 ft.
- 30,000 gal. max capacity
- FRP- fiberglass reinforced polyester
- Adds the ability to separate feed stocks and add feed stocks to Mix Tank as we please
- 5 H.P. Sharp Mixers
- 26 in. Dia. Impellers
- 24 in. Length
- 234 RPM
- Nord Gear Boxes
- Undersized, high TS/TSS has caused us to go through gear boxes and seals.
- Going to belt drive mixers/ larger 10 H.P. motors

FEEDSTOCK HANDLING



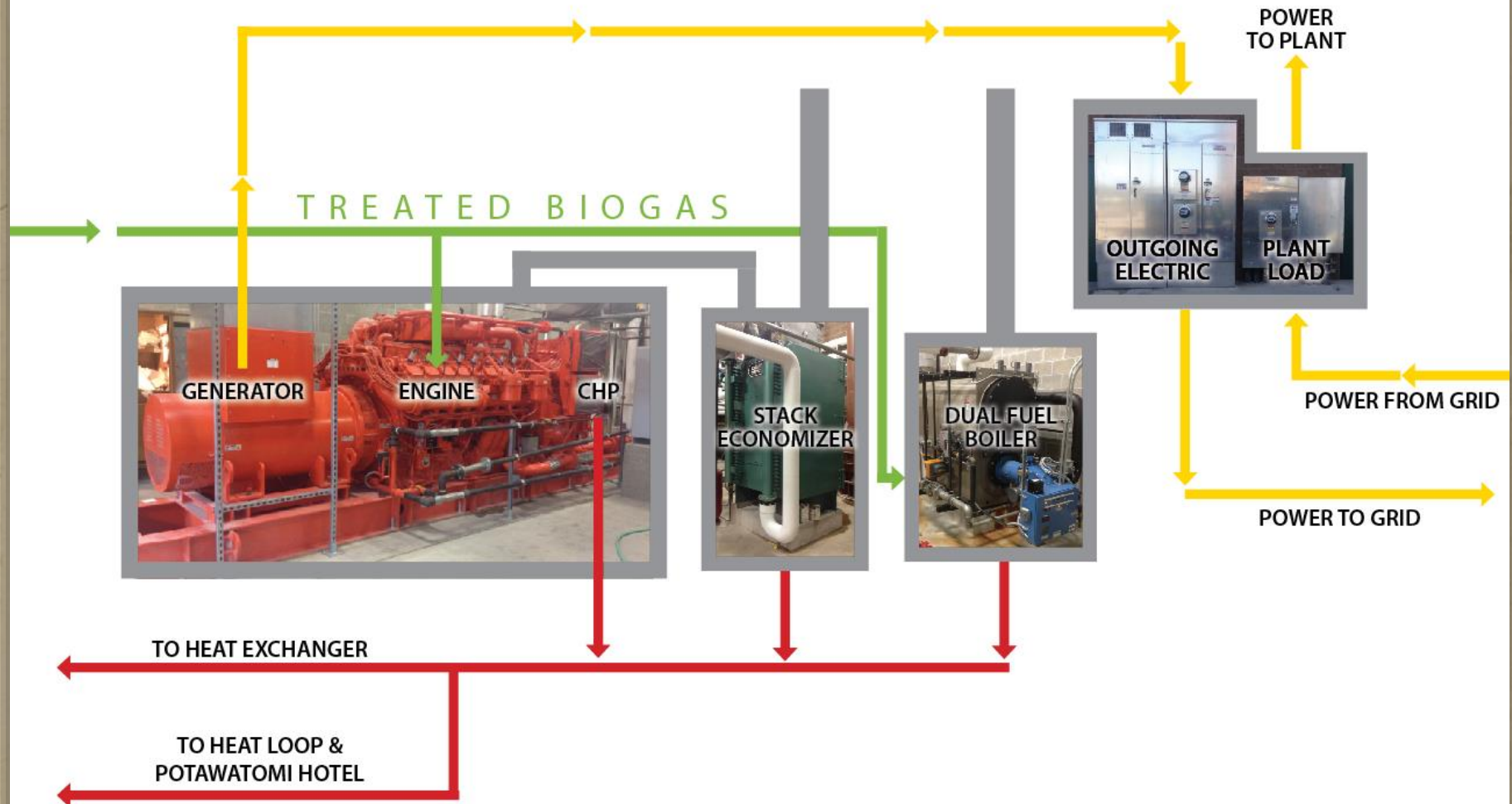
EQ or MIX TANK

- 24 ft. x 48 ft. 160,000 gal. max capacity tank.
- Carbon Steel Bolted Panels
- Epoxy Powder Coated
- 4 Sets of Heating Coils
- 10 H.P. Sharp Mixers/29 in. Dia. Impeller/27 in. Length/261 RPM
- We have had no problem with the heavier mixer

EQ/Mix Tank Feed Pumps

- Two 3 in. Penn Valley Diaphragm/Double Disk Pumps
- VFD 5 H.P. Toshiba Motor/Max RPM 1160
- 65-75 GPM
- Diaphragm pumps handle heavier solids
- Maintenance is easy.
- Seamless Operation
- Penn Valley replaced Gould's Centrifugal Pumps.
- Centrifugal Pumps Clogged
- Maintenance was difficult
- Designed for lower TS/TSS
- Used a lot of electricity

ELECTRICITY/HEAT GENERATION



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